New U.S. Application PATENT

## PRELIMINARY AMENDMENT

## IN THE CLAIMS:

Please cancel claims 1-12 and add new claims 13-24, as shown below in the detailed listing of all claims which are, or were, in this application:

Claims 1-12 (canceled).

- 13. (New) A silicone composition for the treatment of fibrous material, which composition can be crosslinked into an elastomer, comprising:
- (a) at least one polyorganosiloxane (POS) having, per molecule, at least two alkenyl, preferably  $C_2\text{-}C_6$ , groups linked to the silicon;
- (b) at least one polyorganosiloxane having, per molecule, at least three hydrogen atoms linked to the silicon;
- (c) a catalytically effective quantity of at least one catalyst, preferably composed of at least one metal belonging to the platinum group;
  - (d) optionally, at least one adhesion promoter;
  - (e) optionally, a mineral filler;
  - (f) optionally, at least one crosslinking inhibitor;
  - (g) optionally, at least one polyorganosiloxane resin; and

PATENT

(h) optionally, functional additives in order to impart specific properties;

## wherein:

- → it has a dynamic viscosity of between 1000 and 7000 mPa.s at 25°C and more preferably between 2000 and 5000 mPa.s at 25°C before crosslinking; and
- → it has, after complete crosslinking by curing in a fan oven for 30 minutes at 150°C, at least one of the following mechanical properties:
- a Shore A hardness of at least two, preferably between 5 and 65,
- a tensile strength of at least  $0.5~\rm N.mm^{-1}$ , preferably at least  $1.0~\rm N.mm^{-1}$  and more preferably at least  $2~\rm N.mm^{-1}$  and
- an elongation at break of at least 50%, preferably at least 100% and more preferably at least 200%.
- 14. (New) The silicone composition of claim 13, wherein said composition is fluid, and obtained without either diluting or dissolving or emulsifying it, and wherein it is capable of impregnating a fibrous material right to the core and then of crosslinking.

PATENT

- 15. (New) The silicone composition of claim 13, wherein said composition is capable of impregnating a fibrous material right to the core and then of crosslinking so as to form a composite having a capillary rise of less than 20 mm, preferably less than 10 mm and more preferably still equal to 0, the capillary rise being measured according to a T test.
- 16. (New) The silicone composition of claim 13, wherein the polyorganosiloxane (a) has units of formula:

$$W_a Z_b SiO_{(4-(a+b))/2}$$
 (a.1)

in which:

- W is an alkenyl group;
- Z is a monovalent hydrocarbon group, which has no unfavorable effect on the activity of the catalyst and is chosen from alkyl groups having from 1 to 8 carbon atoms inclusive, optionally substituted with at least one halogen atom, and from aryl groups;
- a is 1 or 2, b is 0, 1 or 2 and a + b is between 1 and 3;
  and
- optionally, at least one portion of the other units are units of average formula:

$$Z_cSiO_{(4-c)/2}$$
 (a.2)

PATENT

in which W has the same meaning as above and c has a value between 0 and 3.

17. (New) The silicone composition of claim 13, wherein the polyorganosiloxane (b) contains siloxyl units of formula:

$$H_dL_eSiO_{(4-(d+e))/2}$$
 (b.1)

in which:

- L is a monovalent hydrocarbon group, which has no unfavorable effect on the activity of the catalyst and is chosen from alkyl groups having from 1 to 8 carbon atoms inclusive, optionally substituted with at least one halogen atom, and from aryl groups;
- d is 1 or 2, e is 0, 1 or 2 and d + e has a value between 1 and 3;
- optionally, at least one portion of the other units being units of average formula:

$$L_{q}SiO_{(4-q)/2}$$
 (b.2)

in which L has the same meaning as above and g has a value between 0 and 3.

18. (New) The silicone composition of claim 13, wherein the proportions of (a) and of (b) are such that the molar ratio of the

PATENT

hydrogen atoms linked to the silicon in (b) to the alkenyl radicals linked to the silicon in (a) is between 0.4 and 10.

- 19. (New) The silicone composition of claim 13, wherein the adhesion promoter comprises:
- (d.1) at least one alkoxylated organosilane satisfying the following general formula:

$$R^{1}R^{2}C$$
  $(A)_{x^{1}}$   $G$   $(OR^{5})_{3-x}$   $(d.1)$ 

in which:

- $R^1$ ,  $R^2$ ,  $R^3$  are hydrogenated or hydrocarbon radicals, which are the same or differ from one another and represent hydrogen, a  $C_1$ - $C_4$  linear branched alkyl or a phenyl optionally substituted with at least one  $C_1$ - $C_3$  alkyl;
  - A is a C<sub>1</sub>-C<sub>4</sub> linear or branched alkylene;
  - G is a valency bond;
- $R^4$  and  $R^5$  are radicals, which are identical or different and represent a linear or branched  $C_1\text{-}C_4$  alkyl;
  - x' = 0 or 1; and
  - $\quad \mathbf{x} = 0 \text{ to } 2,$

PATENT

said compound (d.1) being preferably vinyltrimethoxysilane (VTMS);

- (d.2) at least one organosilicon compound comprising at least one epoxy radical, said compound (d.2) being preferably 3-glycidoxypropyltrimethoxysilane (GLYMO); and
- (d.3) at least one metal M chelate and/or a metal alkoxide of general formula  $M(OJ)_n$ , where n is the valency of M and J is a  $C_1$ - $C_8$  linear or branched alkyl, M being chosen from the group consisting of Ti, Zr, Ge, Li, Mn, Fe, Al and Mg, said compound (d.3) preferably being tert-butyl titanate.
- 20. (New) The silicone composition of claim 13, wherein the adhesion promoter is present in an amount of 0.1 to 10% by weight relative to all of the constituents.
- 21. (New) A two-component precursor system for the liquid silicone composition as claimed in claim 13, wherein:
- it is in two separate parts A and B that are intended to be mixed together to form the composition, and in that one of these parts A and B contains the catalyst (c) and only one polyorganosiloxane species (a) or (b); and
- part A or B containing the polyorganosiloxane (b) contains no compound (d.3) of the promoter (d).

PATENT

- 22. (New) The use of a composition as claimed in claim 13, for impregnating a fibrous support, excluding any architectural textile.
- 23. (New) A composite which comprises at least one fibrous support, excluding any architectural textile, impregnated to the core with a crosslinked silicone elastomer obtained from the composition of claim 13.
- 24. (New) The composite of claim 23, having a capillary rise of less than 20 mm, preferably less than 10 mm and more preferably still equal to 0, the capillary rise being measured according to a T test.